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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,068	05/04/2001	Mark Jaworowski	00-684	8156

7590

08/13/2003

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EXAMINER

VALENTINE, DONALD R

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 08/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/849,068

Applicant(s)

JAWOROWSKI ET AL.

Examiner

Donald R. Valentine

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-- Th MAILING DATE of this communication appears on the cov r sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

2. Claims 1-3, 6, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by McGivern, Jr., '626, newly cited.

McGivern, Jr. '626 shows removal of nickel alloy brazing composition from nickel base alloy components comprising providing a brazed assembly of nickel-based alloy components joined by a nickel alloy brazing composition, immersing the assembly in an electrolyte, applying a potential across the electrolyte* at a magnitude wherein the nickel base alloy components are electrochemically passive and the nickel alloy brazing composition dissolves whereby the brazing composition is removed from the components. (See col. 1, lines 45-68; and col. 4, lines 24-35).

Applicants' claim 2 recites mineral acid* which is commonly known as hydrochloric acid, which is as recited by applicants' claim 3 and shown by the reference at col. 3, lines 30-31.

The alloy component and brazing compositions of applicants' claims 6 and 10 are disclosed at col. 6, lines 15-30 of the reference.

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*((Mineral acids (Chem.), inorganic acids, as sulphuric, nitric, phosphoric, hydrochloric, acids, etc., as distinguished from the organic acids. See <http://dictionary.reference.com/search?q=mineral%20acids> Copyright © 2003, Lexico Publishing Group, LLC. All rights reserved. About Dictionary.com).)

Claim Rejections - 35 USC § 103

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGivern, Jr., as applied to claim 1 above, and further in view of Brucken et al.

McGivern teaches a potential of .0.95 v. measured against a mercury-mercury sulfate reference electrode, this voltage being within the range of applicants' claim 4. McGivern teaches a mercury-mercury sulfate reference electrode, but not a silver-silver chloride reference electrode for indicating the potential. (See col. 3, lines 60-65 and col. 4, lines 14-21).

Brucken et al teaches a potential measuring cell with reference electrodes where the reference electrode may be one of silver-silver chloride electrode or mercury-mercury sulphate electrodes. (See column 3, lines 15-25).

In the absence of any unexpected results, it would be considered within the skill of the art to substitute an equivalent reference electrode, 'such as', e.g., one described as being equivalent to the mercury-mercury sulfate electrode of McGivern, Jr., because Brucken suggests the mercury-mercury sulfate reference

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electrode as exemplary of equivalent choices of reference electrodes, e.g., silver-silver chloride electrode being, equivalent to mercury-mercury sulfate electrode.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over McGivern, Jr., as applied to claim 1 above, and further in view of Speirs et al.

McGivern et al do not disclose that the brazing composition has a lower melting point than the components.

Speirs et al disclose a brazed component in which stainless steel elements are brazed together to form brazed joints comprising vane/shroud assemblies in which the braze is a non-ferrous alloy based on an alloy metal (see col. 1, lines 50-55). Speirs et al also disclose that the non-ferrous brazing alloy must have a lower melting point than the metal substrates being joined. (See col. 4, lines 30-35).

It would be considered within the skill of the art to expect the brazing alloy of McGivern et al to have a lower melting point than the joined components because the nature of the brazing process requires that the brazing compound have this physical property in order to enable making a proper joint. It would be further obvious to modify the compositions because McGivern et al suggest that there would be no reason to believe that the method of McGivern et al would not work on other braze compositions. (See col. 6, lines 23-35), especially since the reaction

is dependent on selecting appropriate voltage values to determine the optimum conditions to conduct the process.

Allowable Subject Matter

5. Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The references of record do not show or suggest a brazing composition which has Cr: 7.0% wt; B: 3.10% wt; Si: 4.50% wt.; Fe: 3.0% wt.; C: 01.06 % wt. Max and Ni: remainder.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lucas and Fountain each show treatment of braze alloys.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald R. Valentine whose telephone number is 703-308-3327. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone

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numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink that reads "Donald R. Valentine". The signature is written in a cursive, flowing style.

Donald R. Valentine
Primary Examiner
Art Unit 1742

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August 6, 2003